

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 3 OF 5



VENTURA COUNTY, CALIFORNIA AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
CAMARILLO, CITY OF	065020
FILLMORE, CITY OF	060415
MOORPARK, CITY OF	060712
OJAI, CITY OF	060416
OXNARD, CITY OF	060417
PORT HUENEME, CITY OF	065051
SAN BUENAVENTURA, CITY OF	060419
SANTA PAULA, CITY OF	060420
SIM VALLEY, CITY OF	060421
THOUSAND OAKS, CITY OF	060422
VENTURA COUNTY, UNINCORPORATED AREAS	060413



FEMA

PRELIMINARY

09/30/2016

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FLOOD INSURANCE STUDY NUMBER
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Flood Insurance Rate Map (FIRM)

Table 24: Floodway Data

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	110	1,270	4,650	1.0	233.5	233.5	234.5	1.0
B	1,307	701	2,734	1.8	233.7	233.7	234.7	1.0
C	3,375	269	656	7.3	237.9	237.9	237.9	0.0
D	5,849	44	466	10.2	250.4	250.4	250.4	0.0
E	6,808	20	129	22.0	255.1	255.1	255.1	0.0
F	7,768	36	208	13.7	271.2	271.2	271.2	0.0
G	8,650	27	98	28.8	273.3	273.3	273.4	0.1
H	9,039	46	238	12.9	295.2	295.2	295.3	0.1
I	10,078	53	293	10.5	304.3	304.3	304.5	0.2
J	11,538	22	135	22.6	321.6	321.6	322.0	0.4
K	11,856	39	291	15.4	337.0	337.0	337.3	0.3
L	13,809	57	215	20.9	363.8	363.8	364.2	0.4
M	24,300	136	458	9.0	601.5	601.5	601.5	0.0
N	25,280	780	4,494	0.9	604.0	604.0	604.0	0.0
O	26,470	660	3,277	1.0	604.0	604.0	604.1	0.1
P	28,350	490	1,532	1.8	605.7	605.7	605.8	0.1
Q	30,030	340	405	4.0	612.7	612.7	612.8	0.1
R	31,855	260	274	6.0	624.6	624.6	624.6	0.0
S	33,150	270	680	1.8	643.3	643.3	643.8	0.5

¹Feet above confluence with Conejo Creek

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS**

FLOODWAY DATA

FLOODING SOURCE: ARROYO SANTA ROSA

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	125	15	250	11.7	258.3	258.3	258.3	0.0
B	1,314	300	580	5.1	263.0	263.0	263.3	0.3
C	2,377	167	412	7.1	270.7	270.7	270.9	0.2
D	4,874	160	349	8.4	290.5	290.5	290.6	0.1
E	5,251	350	613	4.8	293.8	293.8	293.9	0.1
F	5,848	560	544	5.4	296.8	296.8	297.0	0.2
G	6,983	73	123	12.3	304.1	304.1	304.4	0.3
H	7,312	16	89	17.0	307.5	307.5	307.5	0.0
I	7,873	12	51	26.3	312.1	312.1	312.1	0.0
J	9,077	12	51	26.1	336.7	336.7	336.7	1.0
K	9,838	12	52	25.8	352.6	352.6	352.8	0.2
L	10,168	12	55	24.3	359.5	359.5	360.2	0.7
M	10,269	12	47	28.6	362.3	362.3	362.3	0.0
N	10,423	14	41	20.8	365.6	365.6	365.6	0.0
O	10,573	16	86	10.0	373.4	373.4	373.4	0.0
P	10,922	39	92	9.3	378.9	378.9	378.9	0.0

¹Feet above confluence with Arroyo Santa Rosa

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: ARROYO SANTA ROSA TRIBUTARY

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	45,400	60	416	14.9	106.3	106.3	106.3	0.0
B	46,300	120	456	13.6	118.2	118.2	118.2	0.0
C	47,300	200	1,230	6.6	150.4	150.4	150.4	0.0
D	48,400	130	966	7.0	151.6	151.6	151.6	0.0

¹Feet above confluence with Calleguas Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: BEARDSLEY WASH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A – H*								
I	50,544	231	2,634	9.9	149.8	149.8	150.6	0.8
J	54,147	134	1,721	15.6	173.6	173.6	173.6	0.0
K	56,199	536	6,411	4.3	190.3	190.3	190.3	0.0
L	59,895	1,007	5,123	5.4	196.4	196.4	196.4	0.0
M	61,794	410	3,758	7.4	211.4	211.4	211.4	0.0
N	65,392	675	5,376	5.1	234.6	234.6	234.6	0.0
O	66,847	318	2,126	13.0	242.5	242.5	242.5	0.0
P	67,901	353	1,910	14.5	248.4	248.4	248.4	0.0
Q	70,113	371	2,205	12.5	260.5	260.5	260.5	0.0
R	74,041	519	2,997	8.6	280.9	280.9	280.9	0.0
S	77,593	833	3,829	6.6	305.5	305.5	305.5	0.0
T	80,643	484	3,405	7.4	325.4	325.4	325.4	0.0
U	88,341	230	2,372	10.2	377.0	377.0	377.0	0.0
V	90,092	260	2,197	8.7	384.5	384.5	384.5	0.0
W	93,860	144	1,685	11.4	418.6	418.6	418.6	0.0
X	95,831	173	1,250	15.2	433.0	433.0	433.0	0.0
Y	97,526	110	1,304	14.6	445.6	445.6	445.6	0.0
Z	99,696	167	1,772	10.7	457.3	457.3	457.7	0.5
AA	102,734	133	1,145	16.6	483.7	483.7	483.8	0.0
AB	107,078	232	1,459	13.1	512.3	512.3	512.5	0.2
AC	110,715	182	3,130	7.1	541.8	541.8	542.5	0.7
AD	115,040	255	2,725	7.4	555.1	555.1	555.5	0.3

¹Feet above mouth at Pacific Ocean

*Data not available

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

**FLOODING SOURCE: CALLEGUAS CREEK / ARROYO LAS POSAS /
ARROYO SIMI**

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AE	120,336	490	6,785	3.0	588.4	588.4	588.4	0.0
AF	124,146	437	6,995	3.8	603.8	603.8	603.9	0.1
AG	127,543	978	4,548	3.8	615.4	615.4	615.4	0.0
AH	131,030	915	5,057	5.2	631.8	631.8	632.4	0.6
AI	131,880	671	3,757	7.1	635.7	635.7	636.7	1.0
AJ	132,000	245	1,749	15.2	637.7	637.7	638.0	0.3
AK	132,380	407	3,595	7.4	642.8	642.8	643.5	0.7
AL	132,930	408	3,769	7.0	644.6	644.6	645.6	1.0
AM	133,355	250	2,058	12.9	645.8	645.8	646.1	0.3
AN	133,705	204	1,641	16.1	649.8	649.8	649.8	0.0
AO	134,030	275	2,874	8.5	654.2	654.2	654.7	0.5
AP	134,980	529	3,047	8.0	657.6	657.6	658.0	0.4
AQ	136,300	484	3,566	6.9	663.4	663.4	664.4	1.0
AR	137,100	250	2,435	10.1	666.9	666.9	667.1	0.2
AS	137,500	250	2,592	9.5	668.7	668.7	669.0	0.3
AT	138,130	250	1,930	12.7	671.6	671.6	671.6	0.0
AU	138,780	299	2,907	8.4	676.8	676.8	677.8	1.0
AV	140,130	208	2,517	9.5	682.5	682.5	682.8	0.3
AW	150,185	200	1,671	11.1	789.1	789.1	789.1	0.0
AX	151,185	132	1,139	16.2	791.6	791.2	791.6	0.4
AY	152,190	137	1,237	13.0	805.4	805.4	802.6	0.0
AZ	153,385	167	1,181	13.6	810.5	810.5	810.5	0.0

¹Feet above mouth at Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

**FLOODING SOURCE: CALLEGUAS CREEK / ARROYO LAS POSAS /
ARROYO SIMI**

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BA	154,535	108	1,044	17.7	827.0	827.0	827.0	0.0
BB	155,680	181	1,544	12.0	837.3	837.3	837.3	0.0
BC	156,670	182	1,397	13.2	844.2	844.2	844.2	0.0
BD	157,700	163	1,585	11.7	851.7	851.7	851.7	0.0
BE	158,795	135	1,128	16.4	858.0	858.0	858.0	0.0
BF	159,940	123	893	14.6	867.2	867.2	867.3	0.1
BG	160,960	172	1,139	11.4	875.9	875.9	876.4	0.5
BH	161,675	185	939	13.8	881.5	881.5	881.5	0.0
BI	162,390	134	1,203	10.8	888.9	888.9	888.9	0.0
BJ	163,615	300	2,169	6.0	894.8	894.8	895.2	0.4
BK	164,615	135	932	14.0	896.9	896.9	896.9	0.0
BL	165,625	110	1,189	10.9	904.9	904.9	904.9	0.0
BM	166,665	225	2, 191	4.5	908.8	908.8	909.0	0.2
BN	167,865	89	639	15.3	915.5	915.5	915.5	0.0
BO	168,960	108	682	14.4	928.9	928.9	928.9	0.0
BP	170,160	93	728	13.5	938.0	938.0	938.0	0.0
BQ	171,325	95	653	15.0	952.2	952.2	952.2	0.0
BR	172,395	95	962	10.2	962.9	962.9	963.1	0.2
BS	173,410	90	869	11.3	966.8	966.8	967.3	0.5
BT	174,395	233	513	20.3	976.2	976.2	976.2	0.0
BU	175,401	110	1,222	6.6	984.1	984.1	984.1	0.0
BV	176,412	137	1,197	6.7	985.8	985.8	985.8	0.0
BW	177,447	56	791	10.1	988.5	988.5	988.5	0.0
BX	178,100	54	578	13.0	988.5	988.5	988.5	0.0
BY	178,483	54	539	13.9	988.5	988.5	988.5	0.0
BZ	179,483	54	407	18.4	989.3	989.3	989.3	0.0

¹Feet above mouth at Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

**FLOODING SOURCE: CALLEGUAS CREEK / ARROYO LAS POSAS /
ARROYO SIMI**

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CA	180,351	54	289	26.0	990.5	990.5	990.5	0.0
CB	181,081	142	505	13.9	998.9	998.9	999.2	0.3
CC	181,711	81	739	9.5	1,007.3	1,007.3	1,007.7	0.4
CD	182,612	194	1,240	5.6	1,013.1	1,013.1	1,013.9	0.8
CE	183,331	430	2,192	3.2	1,022.0	1,022.0	1,022.0	0.0
CF	183,897	327	2,203	3.2	1,029.9	1,029.9	1,030.9	1.0
CG	186,198	390	1,303	2.6	1,046.0	1,046.0	1,047.0	1.0
CH	187,087	367	2,044	1.6	1,058.1	1,058.1	1,058.6	0.5
CI	187,587	519	1,479	2.3	1,062.3	1,062.3	1,062.8	0.5
CJ	188,377	288	1,243	2.7	1,071.4	1,071.4	1,072.1	0.7
CK	188,740	150	845	4.0	1,076.1	1,076.1	1,076.8	0.7
CL	189,615	183	683	4.9	1,086.9	1,086.9	1,087.4	0.5
CM	189,935	326	748	4.5	1,090.8	1,090.8	1,090.8	0.0
CN	190,245	324	730	4.6	1,096.0	1,096.0	1,096.0	0.0
CO	190,925	47	253	13.3	1,108.5	1,108.5	1,108.5	0.0
CP	191,585	40	302	11.1	1,120.2	1,120.2	1,120.4	0.2

¹Feet above mouth at Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: CALLEGUAS CREEK / ARROYO LAS POSAS /
 ARROYO SIMI

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,600	90	778	4.6	57.5	57.5	57.5	0.0
B	3,100	84	675	5.3	57.8	57.8	57.8	0.0
C	4,600	105	740	4.8	59.3	59.3	59.3	0.0
D	5,600	133	830	4.0	60.3	60.3	60.3	0.0
E	7,600	118	512	6.6	63.7	63.7	63.7	0.0
F	11,600	126	621	5.8	75.7	75.7	75.7	0.0
G	14,600	124	574	5.4	83.5	83.5	83.5	0.0
H	16,015	46	238	12.9	87.8	87.8	87.8	0.0

¹Feet above confluence with Revolon Slough

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS**

FLOODWAY DATA

FLOODING SOURCE: CAMARILLO HILLS DRAIN

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	213	2,547	8.8	94.4	94.4	95.4	1.0
B	1,201	413	4,164	5.4	100.1	100.1	100.8	0.7
C	2,488	1,102	7,293	3.1	101.7	101.7	102.3	0.6
D	3,096	1,437	4,833	4.6	102.2	102.2	102.7	0.5
E	3,162	1,449	4,897	4.6	102.4	102.4	102.9	0.5
F	4,536	1,589	5,933	3.8	104.5	104.5	104.7	0.2
G	5,636	1,461	6,405	3.5	105.7	105.7	105.8	0.1
H	6,557	1,180	4,329	5.2	107.1	107.1	107.3	0.2
I	6,643	1,520	4,916	4.6	107.4	107.4	107.5	0.1
J	7,162	1,520	4,916	4.6	107.4	107.4	107.5	0.1
K	8,089	2,410	9,417	2.4	109.3	109.3	109.3	0.0
L	9,974	1,898	4,937	4.7	110.8	110.8	110.8	0.0
M	11,322	1,180	3,994	10.8	113.6	113.6	114.0	0.4
N	12,451	1,526	7,032	8.0	117.1	117.1	117.4	0.3
O	12,770	2,303	12,739	4.3	117.9	117.9	118.2	0.3
P	12,888	1,881	10,591	5.3	117.9	117.9	118.2	0.3
Q	14,580	1,070	8,404	4.2	118.0	118.0	118.8	0.8
R	14,769	323	3,234	7.2	118.7	118.7	118.9	0.2
S	16,729	276	2,974	7.0	120.7	120.7	121.0	0.3
T	17,033	870	6,865	4.4	121.1	121.1	121.8	0.7
U	19,073	561	3,973	6.6	122.1	122.1	122.6	0.5
V	21,501	258	2,474	9.4	126.7	126.7	127.4	0.7

¹Feet above Limit of Floodway*

*Limit of Floodway is approximately 160 feet upstream of confluence with Calleguas Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: CONEJO CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
W	25,229	280	3,383	6.8	143.3	143.3	143.3	0.0
X	26,043	635	2,859	8.2	150.2	150.2	150.2	0.0
Y	28,698	204	1,750	7.1	161.5	161.5	161.7	0.2
Z	30,035	157	2,551	8.2	177.3	177.3	177.6	0.3
AA	30,825	842	4,462	4.7	180.1	180.1	180.2	0.1
AB	33,492	1,230	2,790	7.5	187.4	187.4	187.4	0.0
AC	35,519	1,111	2,547	8.2	193.3	193.3	193.3	0.0
AD	34,631	1,162	2,913	7.1	195.3	195.3	195.3	0.0
AE	36,077	513	2,849	7.3	204.5	204.5	204.7	0.2
AF	36,762	603	2,555	8.1	208.9	208.9	208.9	0.0
AG	37,602	592	2,677	8.7	213.0	213.0	213.4	0.4
AH	38,781	197	1,729	13.4	218.1	218.1	218.2	0.1
AI	39,989	1,272	4,664	5.0	228.3	228.3	228.5	0.2
AJ	40,664	797	2,870	8.1	230.9	230.9	230.9	0.2
AK	41,530	423	2,335	9.7	235.5	235.5	236.4	0.9
AL	42,811	352	2,035	11.1	240.8	240.8	241.3	0.5

¹Feet above Limit of Floodway*

*Limit of Floodway is approximately 160 feet upstream of confluence with Calleguas Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: CONEJO CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	730	80	265	9.0	688.1	688.1	688.1	0.0
B	1,480	60	250	12.3	699.6	699.6	699.6	0.0
C	2,055	40	140	10.9	706.6	706.6	706.6	0.0
D	10,340	30	60	9.3	885.0	885.0	885.0	0.0

¹Feet above confluence with Stewart Canyon Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: FOX CANYON STORM DRAIN

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	4,810	150	321	5.1	81.6	81.6	82.5	0.9
B	6,370	100	250	6.0	92.8	92.8	92.9	0.1
C	7,250	100	237	6.3	96.3	96.3	96.3	0.0
D	8,000	100	218	6.4	99.4	99.4	99.6	0.2
E	9,440	60	198	6.1	106.3	106.3	107.2	0.9
F	10,400	60	217	4.8	110.1	110.1	110.6	0.5

¹Feet above confluence with Camarillo Hills Drain

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: LAS POSAS ESTATES DRAIN

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	250	27	124	15.2	435.4	435.4	435.5	0.1
B	850	58	345	5.5	445.2	445.2	445.8	0.6
C	1,300	29	157	12.0	447.5	447.5	447.6	0.1
D	2,050	30	197	9.6	455.6	455.6	455.6	0.0
E	2,600	12	106	11.8	461.8	461.8	462.6	0.8
F	3,550	121	1,194	2.0	471.7	471.7	471.7	0.0
G	4,300	65	289	8.1	471.7	471.7	471.7	0.0
H	5,600	86	354	6.6	476.9	476.9	476.9	0.0

¹Feet above confluence with Calleguas Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: PEACH HILL WASH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,510	24	240	36.4	463.2	463.2	463.2	0.0
B	3,150	24	200	41.6	469.2	469.2	469.2	0.0
C	4,600	20	190	45.3	501.7	501.7	501.7	0.0
D	5,500	20	190	45.6	524.4	524.4	524.4	0.0
E	6,100	20	180	46.6	539.4	539.4	539.4	0.0
F	7,450	70	530	16.1	585.2	585.2	585.2	0.0
G	8,030	90	560	15.7	604.4	604.4	604.4	0.0

¹Feet above mouth at Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: POLE CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	3,000	600	4,133	9.9	660.5	660.5	661.5	1.0
B	4,180	763	6,416	6.4	671.1	671.1	671.8	0.7
C	5,000	700	3,740	11.0	674.3	674.3	674.7	0.4
D	6,000	448	3,051	13.4	682.8	682.8	682.8	0.0
E	7,040	285	3,519	11.7	694.4	694.4	694.4	0.0

¹Feet above mouth at Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: PIRU CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	200	433 ²	1,977	5.2	14.6	14.6	16.0	1.4
B	450	287 ²	1,988	5.2	16.3	16.3	17.8	1.5
C	790	21 ²	376	23.3	22.3	22.3	23.9	1.6
D	1,665	21 ²	535	15.9	37.5	37.5	40.4	2.9
E	2,165	136 ²	1,776	5.8	47.1	47.1	49.5	2.4
F	2,665	149 ²	1,941	5.3	53.8	53.8	56.6	2.8
G	3,065	113 ²	1,296	8.0	64.4	64.4	67.2	2.8
H	3,465	180 ²	2,112	4.9	70.4	70.4	73.2	2.8

¹Feet above Pacific Ocean

²This width extends beyond county limits

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: RINCON CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,550	590	2,360	8.6	326.8	326.8	326.8	0.0
B	4,440	219	1,563	12.7	348.2	348.2	348.2	0.0
C	6,230	350	1,934	10.3	368.0	368.0	368.0	0.0
D	7,590	393	1,853	10.7	380.2	380.2	380.3	0.1
E	10,320	420	1,754	11.3	406.2	406.2	406.2	0.0
F	13,090	410	1,777	10.2	437.4	437.4	437.9	0.5
G	16,000	224	1,420	12.8	468.0	468.0	468.0	0.0
H	20,670	124	1,050	17.3	513.2	513.2	513.2	0.0
I	21,790	130	2,132	8.5	530.1	530.1	530.2	0.1
J	25,795	116	1,116	13.3	576.4	576.4	577.1	0.7
K	27,020	176	1,290	10.9	590.5	590.5	590.5	0.0
L	28,000	260	1,028	13.8	600.5	600.5	600.5	0.0
M	29,140	238	2,005	7.0	615.4	615.4	615.4	0.0
N	30,840	372	1,172	11.9	630.0	630.0	630.0	0.0
O	31,890	143	852	14.1	643.0	643.0	643.0	0.0
P	32,850	280	1,032	10.8	654.8	654.8	655.8	1.0
Q	34,350	320	1,148	9.8	678.3	678.3	679.0	0.7
R	36,065	230	1,026	12.0	700.6	700.6	701.4	0.8
S	37,740	150	616	11.4	725.4	725.4	726.1	0.7
T	38,715	170	635	11.0	744.9	744.9	745.3	0.4
U	39,735	105	542	12.9	758.7	758.7	758.7	0.0
V	41,580	100	532	13.1	794.6	794.6	794.6	0.0

¹Feet above confluence with Ventura River

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: SAN ANTONIO CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,860	1,895	10,561	8.3	13.7	13.7	13.7	0.0
B	4,000	1,092	6,353	13.9	18.2	18.2	18.5	0.3
C	5,500	4,320	24,269	6.6	23.7	23.7	24.4	0.7
D	7,380	3,701	20,155	8.0	27.1	27.1	28.1	1.0
E	9,700	3,040	20,606	7.8	33.1	33.1	34.1	1.0
F	12,360	1,980	13,456	12.0	41.9	41.9	41.9	0.0
G	15,000	1,150	12,314	13.1	48.2	48.2	48.2	0.0
H	18,000	1,490	14,827	10.9	55.2	55.2	56.2	1.0
I	20,600	1,590	22,576	7.1	64.8	64.8	65.3	0.5
J	23,450	1,683	18,624	8.6	68.5	68.5	68.9	0.4
K	25,600	1,488	10,493	15.3	72.1	72.1	72.1	0.0
L	28,200	1,620	13,499	11.9	80.7	80.7	80.7	0.0
M	31,000	1,430	12,321	13.1	86.2	86.2	86.2	0.0
N	34,000	1,400	13,752	11.7	96.4	96.4	96.8	0.4
O	37,000	1,880	15,625	10.3	100.9	100.9	101.2	0.3
P	40,000	1,500	9,072	17.7	109.4	109.4	109.4	0.0
Q	43,000	1,190	8,612	18.7	117.2	117.2	117.2	0.0
R	45,520	1,700	14,504	11.1	125.2	125.2	125.2	0.0
S	48,500	1,390	10,369	15.5	129.3	129.3	130.0	0.7
T	51,500	1,396	11,808	13.6	143.6	143.6	143.6	0.0
U	54,900	1,123	12,514	12.9	162.1	162.1	162.1	0.0
V	58,870	1,290	8,968	18.0	180.7	180.7	181.1	0.3
W	62,000	1,730	9,832	16.4	189.0	189.0	189.0	0.0
X	65,000	970	14,759	10.9	198.1	198.1	198.2	0.1
Y	68,000	1,020	12,698	12.7	208.2	208.2	208.2	0.0
Z	71,000	1,185	9,283	17.3	219.7	219.7	219.7	0.0

¹Feet above mouth at Pacific Ocean

TABLE 24	FEDERAL EMERGENCY MANAGEMENT AGENCY VENTURA COUNTY, CALIFORNIA AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: SANTA CLARA RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AA	73,600	1,486	14,008	11.5	227.6	227.6	227.7	0.1
AB	77,000	1,600	14,567	11.1	242.0	242.0	242.8	0.8
AC	80,100	1,300	11,200	14.4	250.8	250.8	251.1	0.3
AD	83,140	979	9,143	17.6	260.4	260.4	260.4	0.0
AE	87,100	2,420	25,904	6.2	271.9	271.9	272.8	0.9
AF	90,000	2,280	16,985	9.2	281.7	281.7	281.7	0.0
AG	93,000	2,860	14,946	10.5	288.8	288.8	288.8	0.0
AH	97,000	2,510	15,437	10.2	300.4	300.4	300.8	0.4
AI	100,800	2,227	15,948	9.8	308.5	308.5	308.5	0.0
AJ	104,000	2,160	18,465	8.5	322.0	322.0	322.8	0.8
AK	106,900	2,840	12,784	12.3	333.0	333.0	333.1	0.1
AL	109,960	3,380	16,244	9.7	344.0	344.0	344.8	0.8
AM	112,850	3,150	15,842	9.9	354.2	354.2	355.3	1.1
AN	116,160	2,780	16,948	9.3	367.3	367.3	367.4	0.1
AO	119,730	2,120	15,694	10.0	383.3	383.3	384.3	1.0
AP	120,420	2,230	9,210	10.0	384.8	384.8	384.8	0.0
AQ	122,100	1,520	11,007	8.9	392.3	392.3	392.4	0.1
AR	123,950	1,280	13,159	7.5	401.6	401.6	401.6	0.0
AS	125,000	1,450	12,352	7.9	406.1	406.1	406.1	0.0
AT	126,650	1,800	9,922	9.9	414.0	414.0	414.4	0.4
AU	127,600	400	9,001	10.9	418.9	418.9	419.3	0.4
AV	129,080	1,782	13,451	7.3	426.3	426.3	426.3	0.0
AW	130,910	1,920	8,693	11.3	431.8	431.8	432.6	0.8
AX	137,140	2,370	9,942	9.9	464.6	464.6	465.5	0.9
AY	140,070	1,862 ²	8,358	11.7	482.2	482.2	482.5	0.3
AZ	142,660	1,900	10,646	9.2	496.1	496.1	496.3	0.2

¹Feet above mouth at Pacific Ocean

²Floodway width does not include width of high ground area

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: SANTA CLARA RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BA	145,370	1,698	8,018	12.2	511.4	511.4	511.4	0.0
BB	148,050	2,448	12,171	8.1	527.2	527.2	527.5	0.3
BC	150,700	1,770	9,022	10.2	542.4	542.4	542.8	0.4
BD	152,500	1,720	10,296	8.9	553.4	553.4	553.9	0.5
BE	155,400	2,550	13,094	7.0	567.3	567.3	567.3	0.0
BF	158,500	2,640	10,888	8.5	582.5	582.5	583.2	0.7
BG	161,250	2,150	11,851	7.8	599.0	599.0	599.1	0.1
BH	163,550	1,785	9,210	10.0	612.2	612.2	612.2	0.0
BI	165,670	1,950	11,021	8.3	625.5	625.5	625.5	0.0
BJ	168,700	2,160	11,520	8.0	640.0	640.0	640.0	0.0
BK	176,090	2,100	8,096	7.4	681.3	681.3	681.6	0.3
BL	178,650	1,840	7,751	7.7	698.1	698.1	698.1	0.0
BM	181,300	1,165	6,406	9.4	711.9	711.9	712.0	0.1
BN	184,140	525	5,051	11.9	729.9	729.9	729.9	0.0
BO	186,400	675	5,270	11.4	742.6	742.6	742.6	0.0
BP	189,450	1,020	7,006	8.6	758.7	758.7	758.7	0.0
BQ	192,500	1,275	6,442	9.3	774.8	774.8	774.8	0.0
BR	197,880	1,565	8,327	7.2	808.1	808.1	808.1	0.0
BS	203,200	1,575/ 1,075 ²	7,341	8.2	829.1	829.1	829.1	0.0

¹Feet above mouth at Pacific Ocean

²Width/width within study area

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: SANTA CLARA RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,000	849	6,297	11.6	12.6	12.6	12.6	0.0
B	3,000	1,120	10,674	6.8	17.7	17.7	18.3	0.6
C	5,000	1,700	16,309	4.5	21.2	21.2	21.5	0.3
D	7,130	3,230	15,353	4.8	22.5	22.5	22.9	0.4

¹Feet above mouth at Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: SANTA CLARA RIVER BREAKOUT

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	9,500	*	11,170	7.2	418.6	418.6	418.6	0.0
B	12,100	*	11,260	7.1	436.7	436.7	436.7	0.0
C	19,800	706	9,002	10.2	504.3	504.3	504.3	0.0
D	22,500	1,000	9,172	10.0	532.7	532.7	532.9	0.2
E	25,200	420	5,426	17.0	559.9	559.9	559.9	0.0
F	28,100	473	5,148	17.9	586.2	586.2	586.3	0.1
G	30,300	282	4,179	22.0	611.4	611.4	611.4	0.0

¹Feet above confluence with Santa Clara River

*Data not available

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: SESPE CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,225	105	463	12.2	666.2	666.2	666.2	0.0
B	3,080	64	241	11.3	684.1	684.1	684.1	0.0
C	4,200	52	229	12.2	705.4	705.4	705.4	0.0

¹Feet above confluence with San Antonio Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: STEWART CANYON CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	350	115	549	12.4	723.5	723.5	723.5	0.0
B	1,650	137	578	11.8	748.7	748.7	748.7	0.0
C	3,190	200	577	10.6	777.7	777.7	777.7	0.0
D	3,620	200	663	9.2	786.5	786.5	786.5	0.0
E	4,700	200	641	9.5	803.0	803.0	803.0	0.0
F	5,590	200	641	9.2	816.7	816.7	816.7	0.0
G	7,208	*	*	*	840.7	*	*	*
H	8,783	*	*	*	869.1	*	*	*

¹Feet above confluence with San Antonio Creek

*Data not available

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: THATCHER CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,540	1,621	11,256	6.9	17.2	17.2	17.2	0.0
B	2,570	1,279	6,557	11.9	20.7	20.7	20.7	0.0
C	3,700	986	8,080	9.7	29.0	29.0	29.1	0.1
D	5,500	608	6,017	13.0	40.7	40.7	41.1	0.4
E	7,500	840	9,209	8.5	49.8	49.8	49.8	0.0
F	9,500	683	4,969	15.7	65.5	65.5	65.5	0.0
G	11,500	1,150	5,657	13.8	78.9	78.9	78.9	0.0
H	13,500	464	4,307	17.6	97.8	97.8	97.8	0.0
I	15,450	450	3,933	19.3	118.1	118.1	118.1	0.0
J	17,224	600	7,978	9.5	134.4	134.4	134.6	0.2
K	19,150	556	4,842	15.8	149.1	149.1	149.1	0.0
L	21,050	335	3,774	20.1	161.2	161.2	161.3	0.1
M	23,250	1,000	6,064	12.2	175.8	175.8	175.8	0.0
N	25,350	465	4,273	16.4	191.1	191.1	191.1	0.0
O	27,600	510	4,379	16.0	206.3	206.3	206.3	0.0
P	29,750	343	3,611	19.4	223.9	223.9	223.9	0.0
Q	32,000	850	9,336	7.5	239.4	239.4	239.4	0.0
R	34,000	689	4,458	14.6	250.3	250.3	250.5	0.2
S	36,000	673	4,639	14.0	266.6	266.6	267.0	0.4
T	38,000	740	4,795	13.6	286.3	286.3	287.3	1.0
U	40,000	800	4,857	13.4	303.8	303.8	304.7	0.9
V	42,000	679	5,110	8.0	322.2	322.2	322.3	0.1
W	44,000	1,550	5,282	7.8	345.4	345.4	345.4	0.0
X	46,000	1,987	5,318	7.7	369.5	369.5	369.5	0.0
Y	48,000	809	4,044	9.9	397.7	397.7	398.5	0.8
Z	51,000	507	3,710	10.8	429.1	429.1	429.1	0.0

¹Feet above Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: VENTURA RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AA	53,000	974	3,675	10.9	456.7	456.7	456.7	0.0
AB	55,000	1,097	3,625	11.0	482.2	482.2	482.6	0.4
AC	57,000	1,201	3,885	9.8	511.4	511.4	511.4	0.0
AD	59,000	771	3,175	12.0	543.4	543.4	543.4	0.0
AE	61,000	1,509	3,758	10.1	569.5	569.5	570.4	0.9
AF	63,000	1,049	3,607	10.5	599.1	599.1	599.3	0.2
AG	65,000	850	3,210	11.8	626.2	626.2	626.2	0.0
AH	67,000	1,760	3,520	10.8	657.9	657.9	657.9	0.0
AI	69,000	1,833	4,290	8.9	692.4	692.4	692.4	0.0
AJ	71,000	1,350	3,969	9.6	726.8	726.8	727.5	0.7
AK	73,000	935	3,155	11.6	759.2	759.2	759.6	0.4
AL	75,000	313	2,330	15.7	783.3	783.3	783.3	0.0
AM	77,000	428	2,528	13.8	809.8	809.8	809.8	0.0
AN	78,500	570	3,686	9.5	831.2	831.2	831.2	0.0
AO	80,500	480	2,270	15.4	878.0	878.0	878.0	0.0
AP	82,000	239	2,067	16.9	907.0	907.0	907.0	0.0
AQ	84,000	142	1,488	18.5	955.2	955.2	955.2	0.0

¹Feet above Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: VENTURA RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
S	36,000	673	4,639	14.0	266.6	266.6	267.0	0.4
T	38,000	740	4,795	13.6	286.3	286.3	287.3	1.0
U	40,000	800	4,857	13.4	303.8	303.8	304.7	0.9

¹Feet above mouth at Pacific Ocean

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: VENTURA RIVER WITHOUT CONSIDERATION OF LEVEE

Table 25: Flood Hazard and Non-Encroachment Data for Selected Streams
[Not Applicable to this Flood Risk Project]

6.4 Coastal Flood Hazard Mapping

Flood insurance zones and BFEs including the wave effects were identified on each transect based on the results from the onshore wave hazard analyses. Between transects, elevations were interpolated using topographic maps, land-use and land-cover data, and knowledge of coastal flood processes to determine the aerial extent of flooding. Sources for topographic data are shown in Table 23.

Zone VE is subdivided into elevation zones and BFEs are provided on the FIRM.

The limit of Zone VE shown on the FIRM is defined as the farthest inland extent of any of these criteria (determined for the 1% annual chance flood condition):

- The *primary frontal dune zone* is defined in 44 CFR Section 59.1 of the NFIP regulations. The primary frontal dune represents a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes that occur immediately landward and adjacent to the beach. The primary frontal dune zone is subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune zone occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.
- The *wave runup zone* occurs where the (eroded) ground profile is 3.0 feet or more below the 1-percent annual chance TWL.
- The *wave overtopping splash zone* is the area landward of the crest of an overtopped barrier, in cases where the potential 1-percent annual chance TWL.
- The *breaking wave height zone* occurs where 3-foot or greater wave heights could occur (this is the area where the wave crest profile is 2.1 feet or more above the total stillwater elevation).
- The *high-velocity flow zone* is landward of the overtopping splash zone (or area on a sloping beach or other shore type), where the product of depth of flow times the flow velocity squared ($h v^2$) is greater than or equal to $200 \text{ ft}^3/\text{sec}^2$. This zone may only be used on the Pacific Coast.

The SFHA boundary indicates the limit of SFHAs shown on the FIRM as either “V” zones or “A” zones.

Table 26 indicates the coastal analyses used for floodplain mapping and the criteria used to determine the inland limit of the open-coast Zone VE and the SFHA boundary at each transect.

Table 26: Summary of Coastal Transect Mapping Considerations

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis	Wave Height Analysis	Zone VE Limit	SFHA Boundary
		Zone Designation and BFE (ft NAVD88)	Zone Designation and BFE (ft NAVD88)		
1		VE 13	N/A	Runup	Overtopping
2		VE 33	N/A	Runup	Overtopping
3		VE 15	N/A	Runup	Runup
4		VE 16	N/A	Runup	Runup
5		VE 29	N/A	Runup	Overtopping
6		VE 20	N/A	Runup	Overtopping
7		VE 33	N/A	Runup	Overtopping
8		VE 20, 34	N/A	Runup	Overtopping
9		VE 21, 30	N/A	Runup	Overtopping
10		VE 19, 26	N/A	Runup	Overtopping
11		VE 23, 37	N/A	Runup	Overtopping
12		VE 19, 26	N/A	Runup	Overtopping
13		VE 17, 21	N/A	Runup	Overtopping
14		VE 17, 26	N/A	Runup	Overtopping
15		VE 21	N/A	Runup	Overtopping
16		VE 21, 24	N/A	Runup	Overtopping
17		VE 25	N/A	Runup	Overtopping
18		VE 29	N/A	Runup	Overtopping
19		VE 18, 28	N/A	Runup	Overtopping
20		VE 20, 27	N/A	Runup	Overtopping
21		VE 19	N/A	Runup	Overtopping
22		VE 19	N/A	Runup	Overtopping
23		VE 18	N/A	Runup	Overtopping
24		VE 20	N/A	Runup	Overtopping
25		VE 19	N/A	Runup	Overtopping
26		VE 21	N/A	Runup	Overtopping
27		VE 26	N/A	Runup	Overtopping
28		VE 24	N/A	Runup	Overtopping

Table 26: Summary of Coastal Transect Mapping Considerations, continued

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis	Wave Height Analysis	Zone VE Limit	SFHA Boundary
		Zone Designation and BFE (ft NAVD88)	Zone Designation and BFE (ft NAVD88)		
29		VE 16, 25	N/A	Runup	Overtopping
30		VE 17, 22	N/A	Runup	Overtopping
31		VE 11	N/A	Runup	Runup
32		VE 11, 16-18, 22	N/A	Runup	Runup
33		VE 11, 17-18	N/A	Runup	Runup
34		VE 11, 17	N/A	Runup	Overtopping
35		VE 16 AE 16	N/A	Runup	Overtopping
36		VE 22	N/A	Runup	Overtopping
37		VE 18	N/A	Runup	Runup
38		VE 19	N/A	Runup	Runup
39		VE 16	N/A	Runup	Overtopping
40		VE 18	N/A	Runup	Overtopping
41		VE 18	N/A	Runup	Overtopping
42		VE 14	N/A	Runup	Overtopping
43		VE 9, 14	N/A	Runup	Runup
44		VE 20 AE 20	N/A	Runup	Overtopping
45		VE 19	N/A	Runup	Runup
46		VE 19	N/A	Runup	Runup
47		VE 20	N/A	Runup	Runup
48		VE 21	N/A	Runup	Overtopping
49		VE 20	N/A	Runup	Overtopping
50		VE 21	N/A	Runup	Runup
51		VE 18	N/A	Runup	Runup
52		VE 17	N/A	Runup	Overtopping
53		VE 11	N/A	Runup	Overtopping
54		VE 22	N/A	Runup	Overtopping
55		VE 24	N/A	Runup	Overtopping
56		VE 18	N/A	Runup	Overtopping

Table 26: Summary of Coastal Transect Mapping Considerations, continued

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis	Wave Height Analysis	Zone VE Limit	SFHA Boundary
		Zone Designation and BFE (ft NAVD88)	Zone Designation and BFE (ft NAVD88)		
57		VE 14 – 15	N/A	Runup	Overtopping
58		VE 14 – 15	N/A	Runup	Overtopping
59		VE 15	N/A	Runup	Runup
60		VE 14	N/A	Runup	Runup
61		VE 22	N/A	Runup	Overtopping
62		VE 18	N/A	Runup	Runup
63		VE 16	N/A	Runup	Overtopping
64		VE 15 AE 8	N/A	Runup	Overtopping
65		VE 11, 16 AE 8	N/A	Runup	Overtopping
66		VE 17 AE 8	N/A	Runup	Overtopping
67		VE 18 AE 8	N/A	Runup	Overtopping
68	✓	VE 19 AE 8	N/A	PFD	PFD
69		VE 15 AE 8	N/A	Runup	Overtopping
70		VE 16	N/A	Runup	Runup
71		VE 14, 20 AE 8	N/A	Runup	Overtopping
72		VE 15, 20	N/A	Runup	Overtopping
73		VE 18	N/A	Runup	Overtopping
74		VE 24	N/A	Runup	Overtopping
75		VE 13, 19 AE 8	N/A	Runup	Overtopping
76		VE 19, 26	N/A	Runup	Overtopping
77		VE 12, 17 AE 8	N/A	Runup	Overtopping
78		VE 22 AO 1	N/A	Runup	Overtopping

Table 26: Summary of Coastal Transect Mapping Considerations, continued

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis	Wave Height Analysis	Zone VE Limit	SFHA Boundary
		Zone Designation and BFE (ft NAVD88)	Zone Designation and BFE (ft NAVD88)		
79		VE 22	N/A	Runup	Overtopping
80		VE 35	N/A	Runup	Overtopping
81		VE 18, 26	N/A	Runup	Overtopping
82		VE 20	N/A	Runup	Overtopping
83		VE 18, 22	N/A	Runup	Overtopping
84		VE 28	N/A	Runup	Runup
85		VE 20	N/A	Runup	Runup
86		VE 20	N/A	Runup	Runup
87		VE 18	N/A	Runup	Runup
88		VE 20, 34	N/A	Runup	Overtopping
89		VE 20	N/A	Runup	Overtopping
90		VE 19	N/A	Runup	Runup

6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 31, “Map Repositories”).

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA. A LOMA cannot be issued for properties located on the PFD (primary frontal dune).

To obtain an application for a LOMA, visit www.fema.gov/floodplain-management/letter-map-amendment-loma and download the form “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill”. Visit the “Flood Map-Related Fees” section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at www.fema.gov/online-tutorials.

For more information about how to apply for a LOMA, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA’s determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting www.fema.gov/floodplain-management/letter-map-amendment-loma for the “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill” or by calling the FEMA Map Information eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the “Flood Map-Related Fees” section.

A tutorial for LOMR-F is available at www.fema.gov/online-tutorials.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/mt-2-application-forms-and-instructions and download the form “MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision”. Visit the “Flood Map-Related Fees” section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Ventura County FIRM are listed in Table 27. Please note that this table only includes LOMCs that have been issued on the FIRM panels updated by this map revision. For all other areas within this county, users should be aware that revisions to the FIS Report made by prior LOMRs may not be reflected herein and users will need to continue to use the previously issued LOMRs to obtain the most current data.

Table 27: Incorporated Letters of Map Change

Case Number	Effective Date	Flooding Source	FIRM Panel(s)
10-09-0815P	01-21-2010	Santa Clara River	06111C0901F 06111C0902F 06111C0903F 06111C0904F 06111C0910E

6.5.4 Physical Map Revisions

Physical Map Revisions (PMRs) are an official republication of a community's NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community's chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit www.fema.gov and visit the "Flood Map Revision Processes" section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Ventura County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBMs) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 28, "Community Map History." A description of each of the column headings and the source of the date is also listed below.

- *Community Name* includes communities falling within the geographic area shown on the FIRM, including those that fall on the boundary line, nonparticipating communities, and communities with maps that have been rescinded. Communities with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed in this table unless SFHAs have been identified in this community.
- *Initial Identification Date (First NFIP Map Published)* is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or “pending” (for Preliminary FIS Reports) is shown. If the community is listed in Table 28 but not identified on the map, the community is treated as if it were unmapped.
- *Initial FHBM Effective Date* is the effective date of the first Flood Hazard Boundary Map (FHBM). This date may be the same date as the Initial NFIP Map Date.
- *FHBM Revision Date(s)* is the date(s) that the FHBM was revised, if applicable.
- *Initial FIRM Effective Date* is the date of the first effective FIRM for the community.
- *FIRM Revision Date(s)* is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as Physical Map Revisions (PMR) of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the Ventura County FIRMs in countywide format was 01/20/2010.

Table 28: Community Map History

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Camarillo, City of	09/30/1972	09/30/1972	10/24/1975	09/29/1986	01/07/2015 09/26/2014 01/20/2010 09/29/1986
Fillmore, City of	01/23/1974	01/23/1974	12/19/1975	10/17/1978	09/26/2014 01/20/2010 02/01/1984 05/19/1981
Moorpark, City of	09/29/1986	N/A	N/A	09/29/1986	09/26/2014 01/20/2010 09/29/1986

Table 28: Community Map History, continued

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Ojai, City of	05/03/1974	05/03/1974	11/28/1975	10/17/1978	09/26/2014 01/20/2010 04/19/1983
Oxnard, City of	08/09/1974	08/09/1974	N/A	03/01/1979	TBD 09/26/2014 01/20/2010 10/15/1985
Port Hueneme, City of	07/28/1972	07/28/1972	10/03/1975	09/24/1984	TBD 09/26/2014 01/20/2010
San Buenaventura, City of	05/31/1974	05/31/1974	12/19/1975	09/29/1986	TBD 09/26/2014 01/20/2010 08/19/1987
Santa Paula, City of	05/24/1974	05/24/1974	07/25/1976	04/15/1980	09/26/2014 01/20/2010 09/03/1997 09/18/1985
Simi Valley, City of	05/17/1974	05/17/1974	N/A	09/27/1991	09/26/2014 01/20/2010 09/03/1997
Thousand Oaks, City of	06/07/1974	06/07/1974	N/A	09/29/1978	09/26/2014 01/20/2010 01/03/1983
Ventura County, Unincorporated Areas	01/31/1975	01/31/1975	10/18/1977	10/31/1985	TBD 01/07/2015 09/26/2014 01/20/2010 09/03/1997 09/28/1990 01/05/1989

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 29 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Adams Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Santa Paula, City of; Ventura County, Unincorporated Areas
Alamos Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Simi Valley, City of; Ventura County, Unincorporated Areas
Arroyo Colorado	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Arroyo Conejo	03/01/1978	U.S. Department of Agriculture, Soil Conservation Service	IAA-H-16-72	January 1976	Thousand Oaks, City of; Ventura County, Unincorporated Areas
Arroyo Las Posas	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Arroyo Santa Rosa and Tributary	01/20/2010	Nolte Associates, Inc.	EMS-2000-CO-0057	September 2004; Revised May 2008	Thousand Oaks, City of; Ventura County, Unincorporated Areas
Arroyo Simi	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of
Arundell Barranca	09/29/1986	PRC Toups	H-4032	May 1983	San Buenaventura, City of; Ventura County, Unincorporated Areas
Auto Center Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Balcom Canyon Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Barbara Drive Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Bardsdale Ditch	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Basolo Ditch	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Bear Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Beardsley Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Camarillo, City of; Ventura County, Unincorporated Areas
Bell Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Big Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Big Mountain Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Simi Valley, City of
Big Sycamore Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Big Sycamore Canyon Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Blanchard Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Boosey Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Boulder Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Brea Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Simi Valley, City of; Ventura County, Unincorporated Areas
Brown Barranca	09/29/1986	PRC Toups	H-4032	May 1983	San Buenaventura, City of; Ventura County, Unincorporated Areas
Bus Canyon Drain	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of
Bus Canyon Drain Tributary	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of
Calleguas Creek	01/20/2010	Kasraie Consulting	*	October 2008	Camarillo, City of
Camarillo Hills Drain	01/07/2015	BakerAECOM	Case No. 11-09-3535P	February 2011	Camarillo, City of
Canada De Aliso	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Canada Larga	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Chivo Canyon	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of; Ventura County, Unincorporated Areas
Conejo Creek	01/20/2010	Nolte Associates, Inc.	EMS-2000-CO-0057	September 2004	Camarillo, City of; Thousand Oaks, City of; Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Conejo Mountain Creek	03/01/1978	U.S. Department of Agriculture, Soil Conservation Service	IAA-H-16-72	January 1976	Thousand Oaks, City of
Conejo Park Creek	09/29/1986	PRC Toups	H-4032	July 1983	Ventura County, Unincorporated Areas
Cooper Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Coyote Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Coyote Canyon Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Coyote Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Cozy Del Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Donlon Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Doris Avenue Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Dron Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Dry Canyon Creek	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Dry Canyon Tributary	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of
E Street Drain	10/15/1985	USACE	IAA-H-1974; IAA-H-1675 Order Nos. 13 and 17	March 1977	Oxnard, City of; Ventura County, Unincorporated Areas
East Camarillo Drain	01/07/2015	BakerAECOM	Case No. 11- 09-3535P	February 2011	Camarillo, City of
East Camarillo Drain Tributary	01/07/2015	BakerAECOM	Case No. 11- 09-3535P	February 2011	Camarillo, City of
East Fork Honda Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
East Fork Lord Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
East Fork Tripas Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
East Las Virgenes Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
East Las Virgenes Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
East Tributary	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of
East Tributary Meier Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
East Tributary Somis Drain	01/07/2015	BakerAECOM	Case No. 11- 09-3535P	February 2011	Camarillo, City of
Edgemore Drain	01/07/2015	BakerAECOM	Case No. 11- 09-3535P	February 2011	Camarillo, City of

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Edwards Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Ellsworth Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Erringer Drain	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of
Eureka Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Fagan Canyon	09/03/1997	USACE	General Reevaluation Report	March 1995	Santa Paula, City of; Ventura County, Unincorporated Areas
Fairview Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Fox Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Fox Canyon Storm Drain	04/02/1978	Harris-Toups Associates	H-4032	July 1977	Ojai, City of
Franklin Barranca	09/29/1986	PRC Toups	H-4032	May 1983	San Buenaventura, City of; Ventura County, Unincorporated Areas
Frey Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Gabbert Canyon Creek	09/29/1986	PRC Toups	H-4032	July 1983	Moorpark, City of
Gill Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Gillibrand Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Simi Valley, City of; Ventura County, Unincorporated Areas
Guadaluca Road Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Haines Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Hammond Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Happy Camp Canyon Creek	09/29/1986	PRC Toups	H-4032	July 1983	Moorpark, City of; Ventura County, Unincorporated Areas
Happy Camp Canyon Tributary	09/29/1986	PRC Toups	H-4032	July 1983	Ventura County, Unincorporated Areas
Happy Valley Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Happy Valley Drain South	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Harmon Barranca	09/29/1986	PRC Toups	H-4032	May 1983	San Buenaventura, City of; Ventura County, Unincorporated Areas
Hidden Valley Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Hill Canyon	03/01/1978	U.S. Department of Agriculture, Soil Conservation Service	IAA-H-16-72	January 1976	Thousand Oaks, City of
Hilltop Lane Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Holser Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Honda Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Honda Barranca Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Hoper Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Hummingbird Creek	09/03/1997	Ensign and Buckley Consulting Engineers	EMW-90C-9133	March 1993	Simi Valley, City of
Hummingbird Creek Tributary	09/03/1997	Ensign and Buckley Consulting Engineers	EMW-90C-9133	March 1993	Simi Valley, City of
Hunt Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
J Street Drain	10/15/1985	USACE	IAA-H-1974; IAA-H-1675; Order Nos. 13 and 17	March 1977	Oxnard, City of; Port Hueneme, City of

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Javon Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Jepson Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Kenny Grove Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Koenigstein Road Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
La Jolla Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Lake Eleanor Creek	03/01/1978	U.S. Department of Agriculture, Soil Conservation Service	IAA-H-16-72	January 1976	Thousand Oaks, City of
Lake Piru	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Lake Sherwood	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Lang Creek	01/20/2010	Nolte Associates, Inc.	EMS-2000-CO-0057 Order No. T005	September 2004	Thousand Oaks, City of
Las Lajas Canyon Channel	09/03/1997	Schaaf & Wheeler	92-C402	June 1995	Simi Valley, City of; Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Las Posas Estates Drain	09/29/1986	PRC Toups	H-4032	May 1983	Camarillo, City of; Ventura County, Unincorporated Areas
Las Sauces Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Las Virgenes Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Las Virgenes Canyon Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Laskey Mesa West	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Lime Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Lindero Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Lion Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Little Happy Camp Canyon	09/29/1986	PRC Toups	H-4032	July 1983	Ventura County, Unincorporated Areas
Little Happy Camp Canyon Tributary	09/29/1986	PRC Toups	H-4032	July 1983	Ventura County, Unincorporated Areas
Little Sycamore Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Long Canyon Creek	01/20/2010	Nolte Associates, Inc.	EMS-2000-CO-0057	September 2004	Ventura County, Unincorporated Areas
Long Grade Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Madranio Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Magnolia Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Mahan Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Maxy Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
McNell Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	1988	Ojai, City of; Ventura County, Unincorporated Areas
Medea Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Meier Canyon Creek	09/03/1997	Aqua Resources Incorporated	EMW-89-C-2844	July 1990	Simi Valley, City of; Ventura County, Unincorporated Areas
Mira Monte Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Mission Drain	01/07/2015	BakerAECOM	Case No. 11-09-3535P	February 2011	Camarillo, City of

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Moon Ditch	09/29/1986	PRC Toups	H-4032	May 1983	San Buenaventura, City of; Ventura County, Unincorporated Areas
Moore Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Mud Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
North Fork Canada De Los Alamos	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
North Ramona Place Drain	09/29/1986	PRC Toups	H-4032	July 1983	Ventura County, Unincorporated Areas
North Simi Drain	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of
Nyland Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Oak Canyon Creek	09/03/1997	Aqua Resources Incorporated	EMW-89-C-2844	July 1990	Simi Valley, City of
Oak Canyon Creek (North)	09/03/1997	Aqua Resources Incorporated	EMW-89-C-2844	July 1990	Simi Valley, City of
Oak Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Oak View Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Oleary Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Orcutt Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Oxnard West Drain	10/15/1985	USACE	IAA-H-1974; IAA-H-1675; Order Nos. 13 and 17	March 1977	Port Hueneme, City of
Pacific Ocean	TBD	BakerAECOM	HSFEHQ-09-D-0368	November 2015	San Buenaventura, City of; Oxnard, City of; Port Hueneme, City of; Ventura County, Unincorporated Areas
Padre Juan Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Palo Comado Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Paso Flores Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Peach Hill Wash	01/20/2010	Nolte Associates, Inc.	EMS-2000-CO-0057	September 2004; Revised May 2008	Moorpark, City of; Ventura County, Unincorporated Areas
Piedra Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Piru Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Pole Creek	04/17/1978	Harris-Toups Associates	H-4032	June 1977	Fillmore, City of; Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Ponderosa Drain	01/07/2015	BakerAECOM	Case No. 11-09-3535P	February 2011	Camarillo, City of
Poplin Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Poplin Creek Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Puerta Zuela Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Punte Gorda Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Real Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Reasoner Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Reeves Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Reeves Creek Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Reimer Ditch	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Revolon Slough	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Rincon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Runckle Canyon	09/03/1997	Aqua Resources Incorporated	EMW-89-C-2844	July 1990	Simi Valley, City of; Ventura County, Unincorporated Areas
Salt Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
San Antonio Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ojai, City of; Ventura County, Unincorporated Areas
Sand Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Santa Ana Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Santa Ana Creek Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Santa Clara River	01/01/1984	PRC Toups	H-4032	1983	Santa Paula, City of
Santa Clara River Breakout	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Oxnard, City of; Ventura County, Unincorporated Areas
Santa Felicia Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Santa Felicia Spillway	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Santa Paula Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Santa Paula, City of; Ventura County, Unincorporated Areas
Santa Paula Creek	01/01/1984	PRC Toups	H-4032	1983	Santa Paula, City of
Santa Rosa East Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Serrano Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Sespe Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Shekell Road Drain	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Sherwood Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Shields Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Sisar Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Smith Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Solano Verde Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Somis Drain	01/07/2015	BakerAECOM	Case No. 11-09-3535P	February 2011	Camarillo, City of

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
South Branch Arroyo Conejo	03/01/1978	U.S. Department of Agriculture, Soil Conservation Service	IAA-H-16-72	January 1976	Thousand Oaks, City of; Ventura County, Unincorporated Areas
South Fork Canada De Los Alamos	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
South Grimes Canyon Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Moorpark, City of; Ventura County, Unincorporated Areas
South Grimes Canyon Wash (North)	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
South Grimes Canyon Wash Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Stewart Canyon Creek	04/02/1978	Harris-Toups Associates	H-4032	July 1977	Ojai, City of; Ventura County, Unincorporated Areas
Sulphur Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Sycamore Canyon	09/03/1997	Aqua Resources Incorporated	EMW-89-C-2844	July 1990	Simi Valley, City of
Sycamore Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Tapo Canyon Channel	09/03/1997	Schaaf & Wheeler	92-C4042	June 1995	Simi Valley, City of; Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Tapo Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Simi Valley, City of; Ventura County, Unincorporated Areas
Tapo Canyon Creek (North)	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Tapo Canyon Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Simi Valley, City of; Ventura County, Unincorporated Areas
Thacher Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ojai, City of; Ventura County, Unincorporated Areas
Thousand Oaks North Drain	01/20/2010	Nolte Associates, Inc.	EMS-2000-CO-0057	September 2004	Thousand Oaks, City of
Tierra Rejada Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Timber Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Todd Barranca	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Torey Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Tripas Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Tripas Canyon Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Valley Road Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Ventura River	09/29/1986	Dames & Moore	C-0970	1984	San Buenaventura, City of; Ventura County, Unincorporated Areas
Walnut Canyon Drain	01/20/2010	Nolte Associates, Inc.	EMS-2000-CO-0057	September 2004	Moorpark, City of; Ventura County, Unincorporated Areas
Warring Canyon Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Warring Wash	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
West Camarillo Hills Drain Tributary	01/07/2015	BakerAECOM	Case No. 11-09-3535P	February 2011	Camarillo, City of
West Fifth Street Drain	10/15/1985	USACE	IAA-H-1974; IAA-H-1675, Order Nos. 13 and 17	March 1977	Oxnard, City of; Ventura County, Unincorporated Areas
West Fork Medea Creek	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
West Fork Orcutt Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
West Fork Salt Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
West Fork Salt Canyon Tributary	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report, continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
West Tributary Long Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
West Wooley Drain	10/15/1985	USACE	IAA-H-1974; IAA-H-1675, Order Nos. 13 and 17	March 1977	Port Hueneme, City of
White Oak Creek	09/03/1997	Ensign and Buckley Consulting Engineers	EMW-90C-9133	March 1993	Simi Valley, City of
White Oak Tributary	09/03/1997	Ensign and Buckley Consulting Engineers	EMW-90C-9133	March 1993	Simi Valley, City of
Windmill Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Wood Canyon	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas
Wood Ranch Reservoir	09/28/1990	DMA Consulting Engineers, Inc.	EMW-86-C-2227	January 1988	Ventura County, Unincorporated Areas

*Data not available

7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and previous Flood Risk Projects are shown in Table 30. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Camarillo, City of	01/2015	04/29/2010	Initial CCO	District Representative and District Chief of Staff for Congress, representatives of FEMA, the USACE, BakerAECOM, LLC and community officials
		08/28/2013	Final CCO	FEMA Region IX representatives, and representatives for City of Camarillo
Fillmore, City of	01/20/2010	07/29/2004	Initial CCO	FEMA, the community, and the study contractor
		09/21/2005	Final CCO	FEMA, the community, and the study contractor
Moorpark, City of	01/20/2010	07/29/2004	Initial CCO	FEMA, the community, and the study contractor
		09/21/2005	Final CCO	FEMA, the community, and the study contractor
Ojai, City of	09/26/2014	11/10/2010	Initial CCO	FEMA, the community, and the study contractor
		05/22/2013	Final CCO	FEMA, the community, and the study contractor
Oxnard, City of	TBD	10/26/2015	Initial CCO	FEMA, the community, US Navy, Kasraie Consulting, NextGen, Rincon Consultants, and BakerAECOM
		TBD	Final CCO	TBD
Port Hueneme, City of	TBD	10/26/2015	Initial CCO	FEMA, the community, US Navy, Kasraie Consulting, NextGen, Rincon Consultants, and BakerAECOM
		TBD	Final CCO	TBD
San Buenaventura, City of	TBD	10/26/2015	Initial CCO	FEMA, US Navy, Kasraie Consulting, NextGen, Rincon Consultants, and BakerAECOM
		TBD	Final CCO	TBD
Santa Paula, City of	01/20/2010	07/29/2004	Initial CCO	FEMA, the community, and the study contractor
		09/21/2005	Final CCO	FEMA, the community, and the study contractor

Table 30: Community Meetings, continued

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Simi Valley, City of	01/20/2010	07/29/2004	Initial CCO	FEMA, the community, and the study contractor
		09/21/2005	Final CCO	FEMA, the community, and the study contractor
Thousand Oaks, City of	01/20/2010	07/29/2004	Initial CCO	FEMA, the community, and the study contractor
		09/21/2005 01/11/2008	Final CCO	FEMA, the community, and the study contractor
Ventura County, Unincorporated Areas	TBD	10/26/2015	Initial CCO	FEMA, Ventura County, US Navy, Kasraie Consulting, NextGen, Rincon Consultants, and BakerAECOM
		TBD	Final CCO	TBD

SECTION 8.0 – ADDITIONAL INFORMATION

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see www.fema.gov.

The additional data that was used for this project includes the FIS Report and FIRM that were previously prepared for Ventura County, California.

Table 31 is a list of the locations where FIRMs for Ventura County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

Table 31: Map Repositories

Community	Address	City	State	Zip Code
Camarillo, City of	Public Works Department 601 Carmen Drive	Camarillo	CA	93010
Fillmore, City of	City Hall 250 Central Avenue	Fillmore	CA	93015
Moorpark, City of	City Hall 799 Moorpark Avenue	Moorpark	CA	93021
Ojai, City of	City of Ojai Public Works Department 401 South Ventura Street	Ojai	CA	93024
Oxnard, City of	City of Oxnard Planning Department 214 South C Street	Oxnard	CA	93030
Port Hueneme, City of	City of Port Hueneme Public Works Department 250 North Ventura Road	Port Hueneme	CA	93041
San Buenaventura, City of	San Buenaventura City Hall 501 Poli Street	Ventura	CA	93001
Santa Paula, City of	City Hall 970 Ventura Street	Santa Paula	CA	93060
Simi Valley, City of	City Hall 2929 Tapo Canyon Road	Simi Valley	CA	93063
Thousand Oaks, City of	Public Works Department 2100 Thousand Oaks Boulevard	Thousand Oaks	CA	91362

Table 31: Map Repositories, continued

Community	Address	City	State	Zip Code
Ventura County, Unincorporated Areas	Ventura County Hall of Administration 800 South Victoria Avenue	Ventura	CA	93009

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 32.

Table 32 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the State NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of State and local GIS data in their state.

Table 32: Additional Information

FEMA and the NFIP	
FEMA and FEMA Engineering Library website	www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/engineering-library
NFIP website	www.fema.gov/national-flood-insurance-program
NFHL Dataset	msc.fema.gov
FEMA Region IX	FEMA Region IX, 1111 Broadway, Suite 1200, Oakland, CA 94607 (510) 627-7181
Other Federal Agencies	
USGS website	www.usgs.gov
Hydraulic Engineering Center website	www.hec.usace.army.mil
State Agencies and Organizations	
State NFIP Coordinator	James Eto California Department of Water Resources 3464 El Camino Avenue, Suite 200 Sacramento, CA 95821 916-574-1409 jeto@water.ca.gov
State GIS Coordinator	David Harris, Agency Information Coordinator California Resources Agency 1416 Ninth Street, Room 1311 Sacramento, CA 95814 Phone: 916-445-5088 david.harris@resources.ca.gov

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

Table 33 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Aerial Topographic Maps, 1987		<i>Topographic Map, Rincon Creek, Scale 1:4,800, Contour Interval 4 feet.</i>			February 26, 1987	
City of Simi Valley, 1987		<i>Photo Maps, Scale 1:1,200</i>		Simi Valley, California	March 31, 1987	
Daily Free Press, 1907	Daily Free Press	<i>High Seas Wreck Ventura Wharf</i>			December 1907	
David R. Dawdy, 1979		<i>"Flood Frequency Estimates on Alluvial Fans," Journal of the Hydraulics Division ASCE, Proceedings, Vol. 105, No. HY11</i>	David R. Dawdy		1979	
Kasraie Consulting	Kasraie Consulting	<i>Floodplain Map Revision, City of Camarillo, California</i>			November 2007	
MAPIX	Federal Emergency Management Agency	<i>Flood Insurance Restudy, Santa Clara River and Tributaries, Ventura County, California</i>	Mainland Joint Venture of Airborne 1, Dewberry, Schaaf and Wheeler, TerraPoint, and URS		May 2008	
Martha J. Shaw, 1980	Scripps Institute of Oceanography	<i>Artificial Sediment Transport and Structures in Coastal Southern California</i>	Martha J. Shaw		December 1980	
Nolte Associates, Inc.	Federal Emergency Management Agency	<i>Ventura County Flood Insurance Study</i>			September 2004	FEMA Flood Map Service Center msc.fema.gov

Table 33: Bibliography and References, continued

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Oxnard, California 1967, 1968	City of Oxnard	<i>Topographic Maps, Scale 1:4,800, Contour Interval 10 feet</i>		Oxnard, California	1967, 1968	
OWI, 2009	Oceanweather Inc.	<i>California Pacific Coastal Studies (Southern Coastal Counties): High Resolution Deep Water Wave Climate Forcing Development 1960-2009</i>	Oceanweather Inc.		2009	
PRC Toups	PRC Toups	<i>Santa Clara River Diversion Structure Engineering Report</i>			August 1978	
SIO, 2014	Scripps Institute of Oceanography	<i>California Open Pacific Coast: Southern California Shallow Water Wave Climates SHELF Model Hindcast. California Coastal Analysis and Mapping Project: Open Pacific Coast Phase II</i>	SIO		2014	
State of California, 1980	State of California, Department of Boating and Waterways	<i>Summary Report of man's Impact on the California Coastal Zone</i>	Dr. Douglas L. Inman		June 1980	
Steve Howe, 1978	California Tomorrow Environmental Intern Program, California Coastal Commission	<i>Wind Damage Along the California Coast, Winter 1977-78</i>	Steve Howe		December, 1978	

Table 33: Bibliography and References, continued

Citation in this FIS	Publisher/Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/Date of Issuance	Link
USACE, 1969	U.S. Army Corps of Engineers, Los Angeles District	<i>Appendix C: Report on Floods of January and February 1969 in Ventura County</i>			1969	
USACE, 1970	U.S. Army Corps of Engineers	<i>Hydrology for Floodplain Information Studies, Ventura River, Ventura County, California</i>			December 1970	
USACE, 1971	U.S. Army Corps of Engineers, South Pacific Division	<i>National Shoreline Study: California Regional Inventory</i>			August 1971	
USACE, 1972	U.S. Army Corps of Engineers, Hydrologic Engineering Center	<i>HEC-2 Water-Surface Profiles, Generalized Computer Program, Users Manual</i>			February 1972	
USACE, 1973	U.S. Army Corps of Engineers, Los Angeles District	<i>Floodplain Information, San Antonio Creek and Tributaries, Vicinity of Ojai, California</i>			June 1973	
USACE, 1978	U.S. Army Corps of Engineers, San Francisco and Los Angeles Districts	<i>Winter Storm Damage Along the California Coast 1977-1978</i>	George W. Domurat		1978	
USACE, 1980	U.S. Army Corps of Engineers, Los Angeles District	<i>Ventura County, California: Survey Report for Beach Erosion Control</i>			May 1980	

Table 33: Bibliography and References, continued

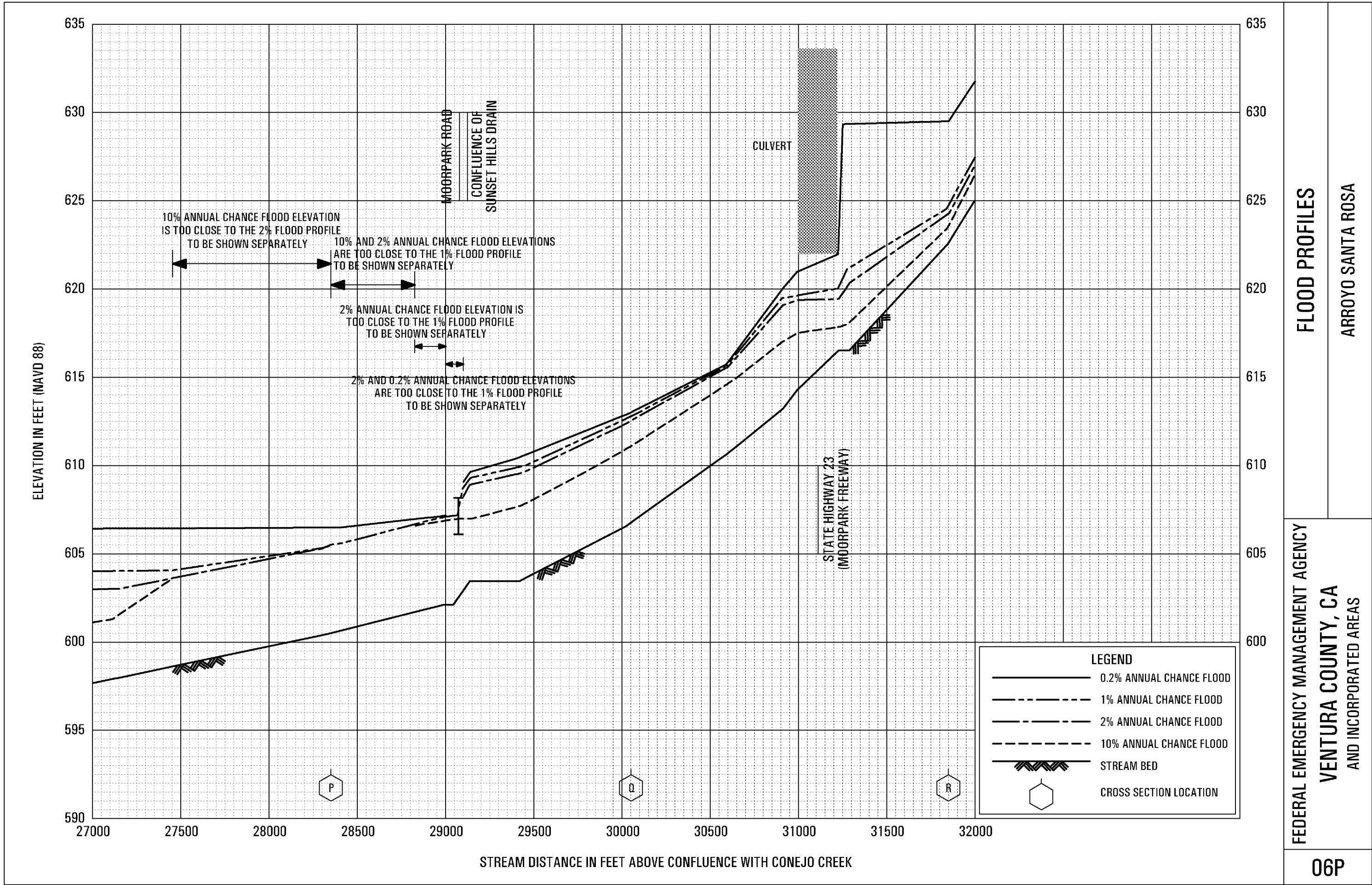
Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USACE, 1985	U.S. Army Corps of Engineers, Los Angeles District	<i>Cameros Creek Debris/Detention Basin, Goleta, California, Reconnaissance Report, Hydrology, Preliminary</i>			April 1985	
USACE, 1987	U.S. Army Corps of Engineers, Los Angeles District	<i>Calleguas Creek Hydrology for Survey Report, Ventura County, California</i>			November 1987	
USACE, April 1973	U.S. Army Corps of Engineers	<i>Hydrology for Floodplain Information and Flood Insurance Studies, Santa Clara River and Tributaries, Ventura County, California</i>			April 1973	
USACE, April 1977	U.S. Army Corps of Engineers	<i>Regional Flood Frequency Study, Newhall, Saugus and Vicinity, Los Angeles County, Santa Clara River and Tributaries</i>			April 28, 1977	
USACE, August 1977	U.S. Army Corps of Engineers	<i>Hydrology for Special Flood Hazard Study, Calleguas Creek and Revolon Slough, Ventura County, California</i>			August 1977	
USACE, February 1977	U.S. Army Corps of Engineers	<i>Hydrology for Flood Insurance Studies, City of Santa Paula, Ventura County, California</i>			February 1977	
USACE, June 1977	U.S. Army Corps of Engineers	<i>Topographic Map, Santa Paula Creek, Scale 1:2,400, Contour Interval 2 feet</i>			June 1977	

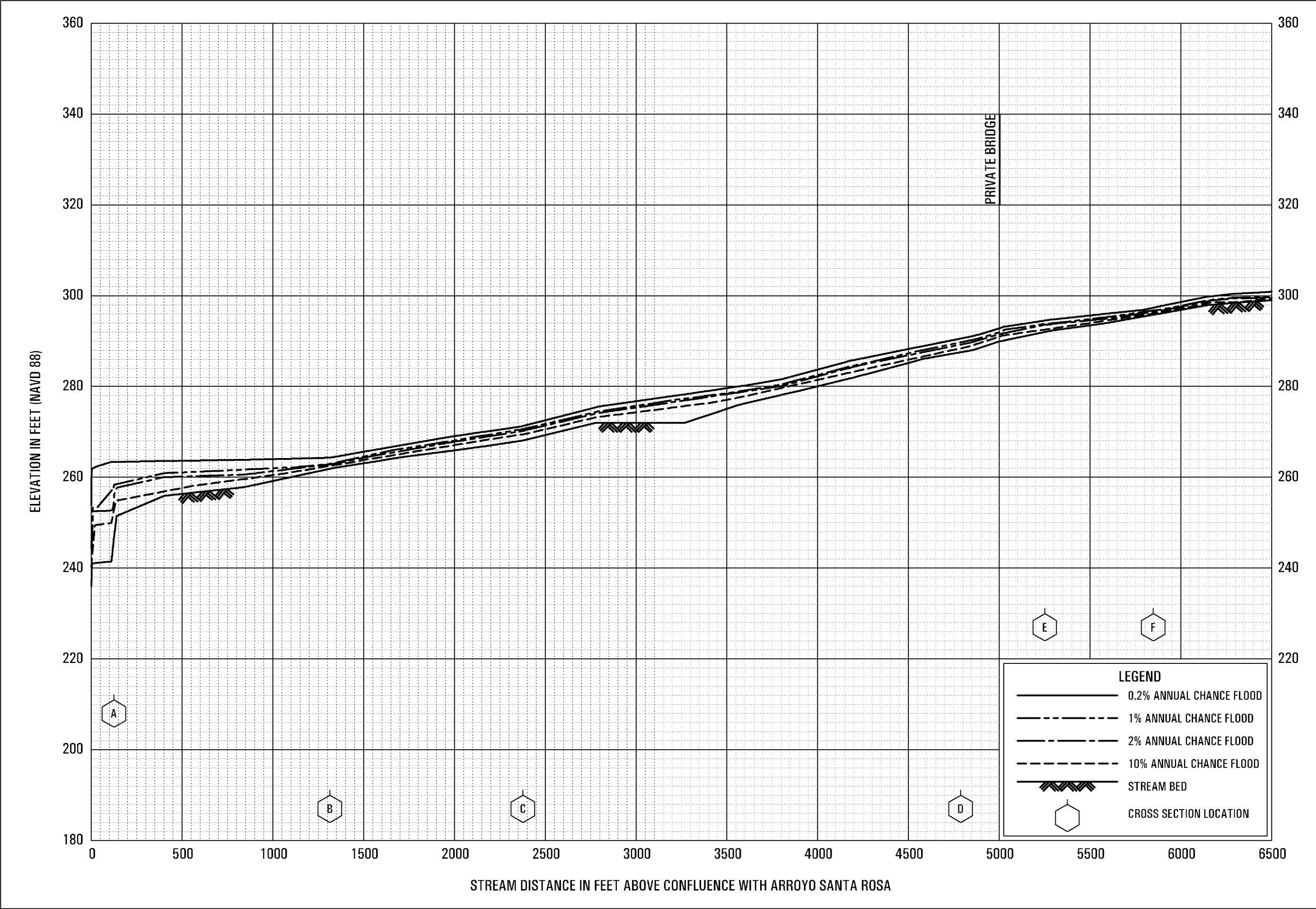
Table 33: Bibliography and References, continued

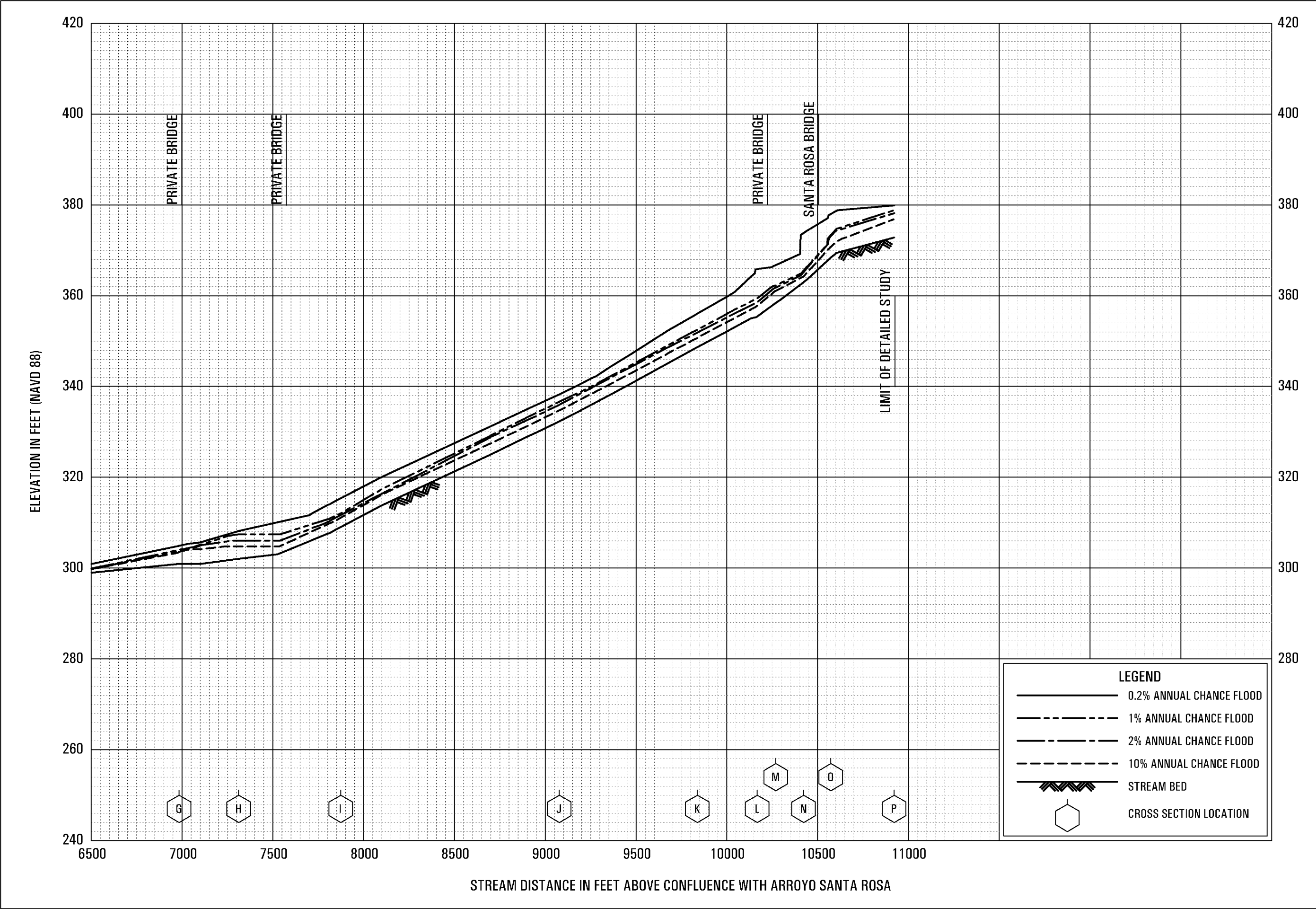
Citation in this FIS	Publisher/Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/Date of Issuance	Link
USACE, January 1973	U.S. Army Corps of Engineers, Hydrologic Engineering Center	<i>HEC-1 Flood Hydrography Package, Users Manual</i>			January 1973	
USACE, October 1973	U.S. Army Corps of Engineers, Hydrology Engineering Center	<i>HEC-2 Water-Surface Profiles, Computer Program 723X6-L202A</i>		Davis, California	October 1973	
U.S. Department of the Interior, 1982	U.S. Department of the Interior, Geological Survey, Hydrology Subcommittee	<i>Guidelines for Determining Flood Flow Frequency, Bulletin No. 17B</i>			March 1982	
VCDPW, 1967	Ventura County Department of Public Works	<i>Topographic Maps, Scale 1:6,000, Contour Interval 20 feet.</i>			1967	
VCDPW, 1967-1979	Ventura County Department of Public Works	<i>Topographic Maps, Scale 1:2,400, Contour Intervals 2 and 5 feet.</i>			1967-1979	
VCFCD, 1965, et cetera	Ventura County Flood Control District	<i>Topographic Maps, Scale 1:1,200, Contour Intervals 2 and 5 feet.</i>		Fillmore, California	1965, 1968, and 1971	
VCFCD, 1970	Ventura County Flood Control District	<i>Topographic Maps, Scale 1:2,400, Contour Intervals 2 or 5 feet.</i>		Oxnard, California	1970, revised 1975	

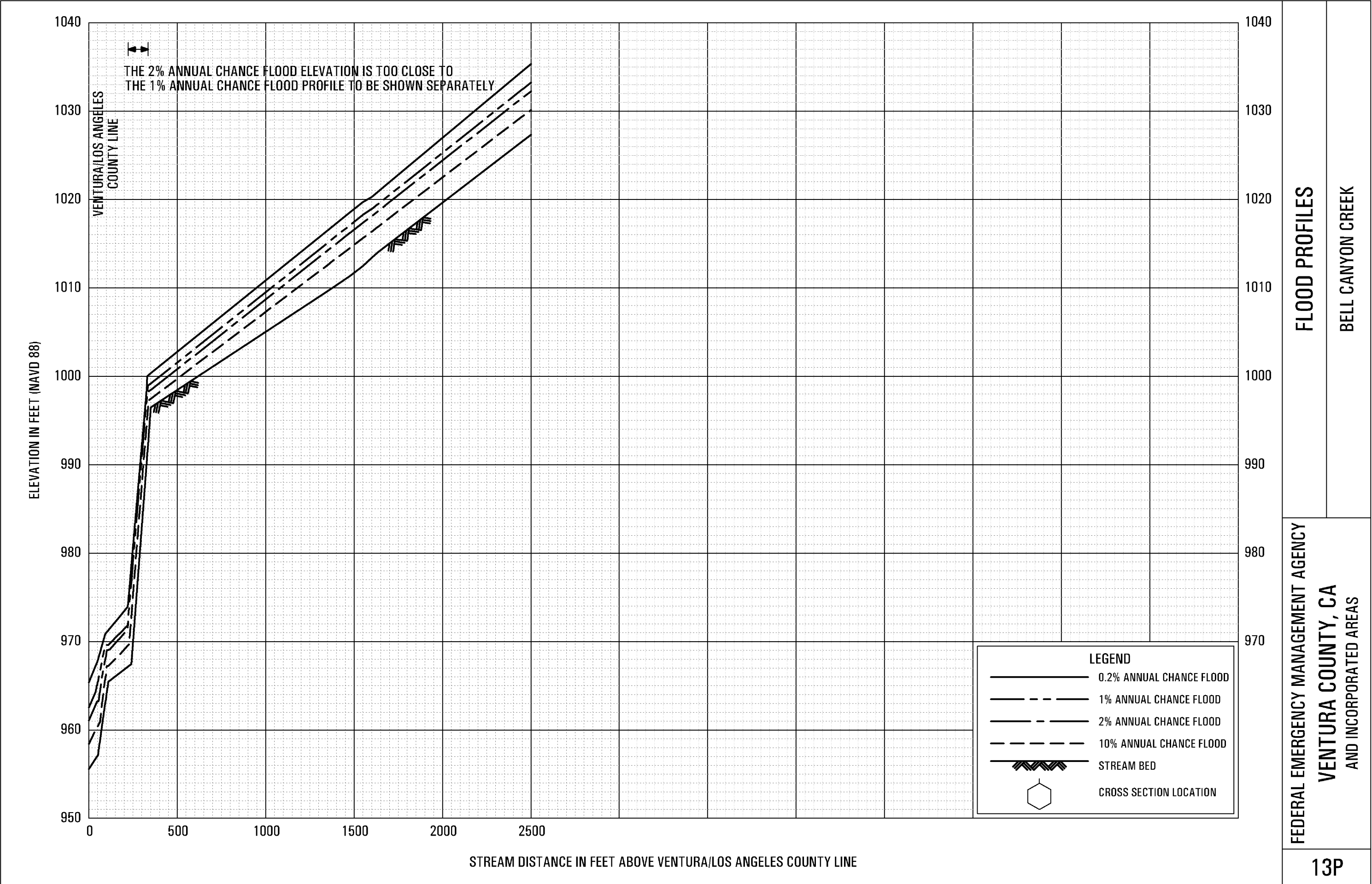
Table 33: Bibliography and References, continued

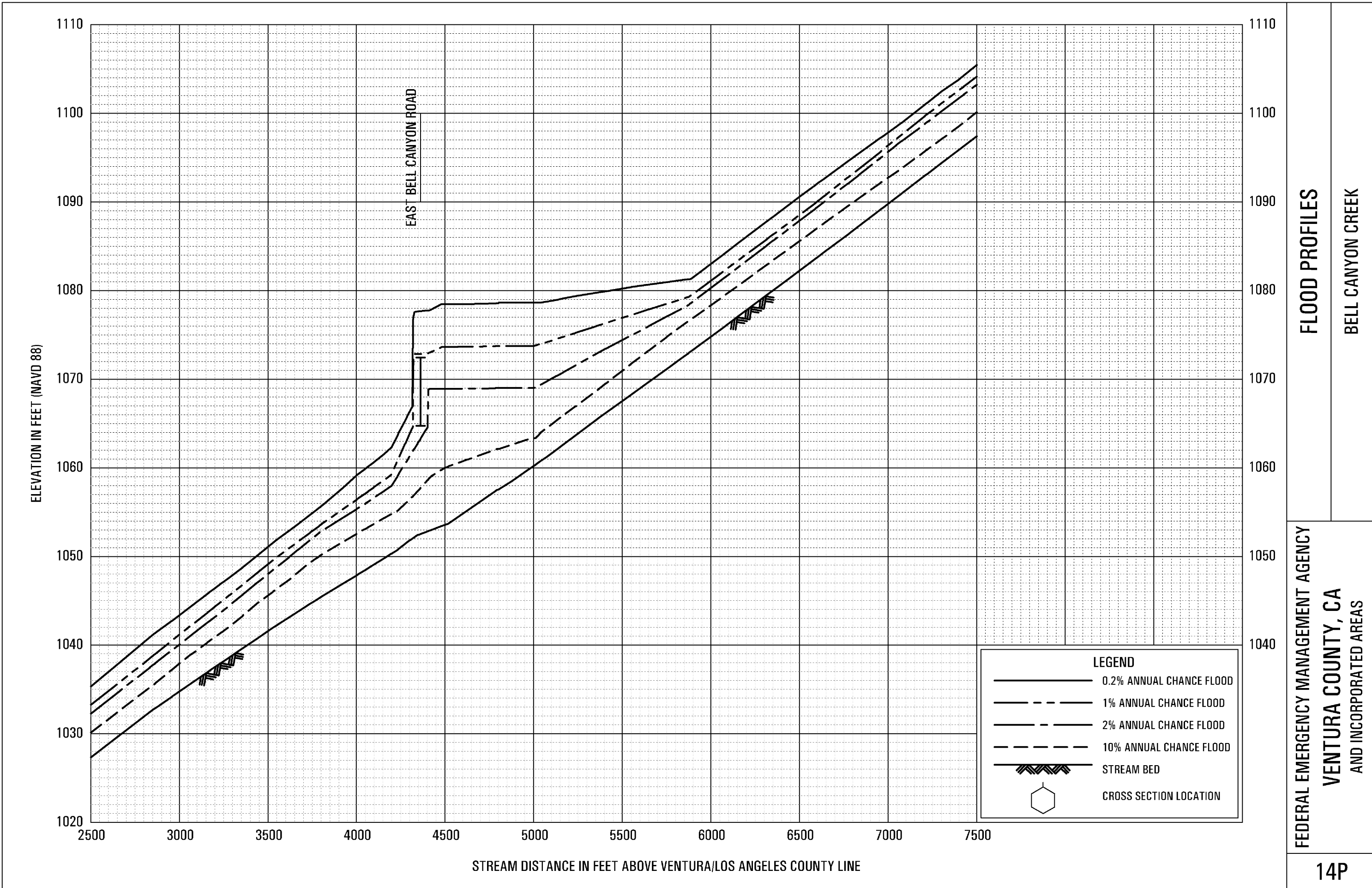
Citation in this FIS	Publisher/Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/Date of Issuance	Link
VCFCFCD & VCSMD, 1977	Ventura County Flood Control District and Ventura County Surveying and Mapping Division	<i>Topographic Maps, Scale 1:2,400, Contour Interval 2 feet.</i>		Ojai, California	1977	
Ventura County Flood Control District, September 1969	Ventura County Flood Control District	<i>The Great Floods of 1969</i>			September 1969	
Ventura County, 1985	Ventura County, Public Works Agency, Flood Control and Water Resources Department	<i>Hydrology Manual</i>			Reprinted 1985	











FLOOD PROFILES

BELL CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
VENTURA COUNTY, CA
AND INCORPORATED AREAS

